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**Exhibit R-2, RDT&E Budget Item Justification:** PB 2012 Navy **DATE:** February 2011

<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0604230N: <i>Warfare Support System</i>							
<b>COST (\$ in Millions)</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012 Base</b>	<b>FY 2012 OCO</b>	<b>FY 2012 Total</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
Total Program Element	6.796	3.733	9.944	-	9.944	10.158	9.813	10.548	10.770	Continuing	Continuing
3326: <i>NIWO Rapid Capabilities Development for CIC</i>	-	-	5.279	-	5.279	5.417	5.561	5.736	5.925	Continuing	Continuing
4011: <i>Naval Coastal Warfare Surv and C4I Sys</i>	6.796	3.733	4.170	-	4.170	3.750	3.263	3.823	3.855	Continuing	Continuing
9C86: <i>Combatant Craft Replacement</i>	-	-	0.495	-	0.495	0.991	0.989	0.989	0.990	Continuing	Continuing

**A. Mission Description and Budget Item Justification**

The Naval Coastal Warfare (NCW) community consists of 22 Mobile Inshore Undersea Warfare (MIUW) units and 8 Harbor Defense Command (HDC) units operating Mobile Ashore Support Terminal IIIs (MAST IIIs). NCW also includes 14 Inshore Boat Units (IBU) comprised of 6 small craft (boats) each on which are installed C4I systems. The Mobile Inshore Undersea Warfare - System Upgrade (MIUW-SU), the primary system used by the NCW MIUW Units, is the only land-based and rapidly deployable mobile Navy system with the ability to conduct surface and subsurface surveillance in coastal and littoral areas. The system provides detailed contact information via various C4I systems to the tactical area commander based on radar, visual, thermal, electronic, and underwater acoustic sensor information. Missions supported with the MIUW-SU's are: OCONUS and INCONUS Force Protection, protecting port areas, high value assets, and surveilling the near shore areas. The MAST III is the C4ISR hub for the NCW Commander. MAST IIIs deploy to support Force Protection/Force Security Officer for Commander, Amphibious Group in its Harbor Defense and Coastal Sea Control missions.

In the aftermath of the attack on USS COLE and particularly post 11 SEP, the role, structure, and utilization for the NCW program has changed appreciably and continues to evolve in the face of developing world events. However, the core competencies resident in expeditionary NCW forces to conduct surveillance, C4I and patrol/interdiction have not changed.

NCW remains a specialized force constituted to accomplish specific tasks under specific conditions, but also agile enough to fill emergent and non-traditional roles. Post 11 SEP, NCW Groups and Units have been mobilized to perform force protection missions at different levels in all CinC area of responsibility (AOR)'s and within the continental United States in support of Maritime Homeland Security. This RDT&E exhibit supports the future direction of Naval Coastal Warfare as it is being determined externally by world events and internally by the progress of DoD initiatives to replace Cold War forces and capabilities with 21st century transformational forces and capabilities. NCW forces currently field legacy systems designed to counter more traditional military threats in a two Major Theater War scenario. Future NCW forces will develop into a highly effective, relatively low cost transformational force capable of operating anywhere in the world to perform a spectrum of force protection missions ranging from full scale port security/harbor defense operations during wartime to short duration point defense of high value units or facilities in operations other than war. This transformational force will be agile, tailorable, and scalable and will use applied technology to quickly detect, deter or interdict potential threats to DoN assets in the littoral environment. Next generation surface and subsurface surveillance systems, as well as enhanced C4I capabilities, are required to meet these operational objectives. These capabilities must be interoperable with higher and adjacent echelons of command (to include coalition allies) as well as with supporting elements to include joint forces.

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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2012 Navy		<b>DATE:</b> February 2011
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>		<b>R-1 ITEM NOMENCLATURE</b> PE 0604230N: <i>Warfare Support System</i>
<p>Sea Eagle is an Advanced Concept Technology Demonstration (ACTD) with USN as lead service and USSOCOM as the Combatant Command sponsor. Sea Eagle will provide integrated and enhanced technologies in order to provide persistent, clandestine, and unattended monitoring of denied and sensitive maritime, littoral, and harbor areas. These sensors and systems will be deliverable by Special Operational Forces (SOF) and networked in a multi-media (sea, air, land) system of systems approach. Sea Eagle will focus on close access networking, both wireless through air and underwater, to support networked tactical sensors. The special operations warfighter will tactically emplace Sea Eagle systems to provide targeted, tactical information that complements national and theater intelligence assets to enable a layered intelligence collection strategy.</p> <p>Riverine Force will integrate and employ a variety of surface and air assets, special vehicles, weapons and appropriately trained personnel. Mission assets needed to support the operational capabilities will vary widely dependant on the Host Nations involved. The Riverine Squadron will deploy with inherent, but limited, force protection capabilities. The Modular Unmanned Scouting Craft Littoral (MUSCL) is man-portable "X-Class" Unmanned Surface Vehicle providing enhanced surveillance and reconnaissance capability to Naval Expeditionary Combat Command (NECC) Riverine forces.</p> <p>Regional Maritime Awareness Capability (RMAC) - support GWOT by providing other USG Agencies with maritime traffic information that is not currently available. RMAC also provides enhanced regional security, safety, economic stability and environmental protection through shared maritime domain awareness (MDA).</p> <p>Naval Irregular Warfare Office (NIWO) will provide for the identification and assessment of available technologies to confront irregular challenges supporting the warfighter. It provides for the validation and combat demonstration of identified technologies and/or packages of technologies to meet warfighter goals via: field and/or lab testing/demonstration; independent mission testing/demonstration and/or; coordinated mission testing/demonstration. The goal of the NIWO office is to identify those requirements necessary to meet the immediate warfighter needs, integrate those existing unique and/or related capabilities that can best meet those warfighter needs, test those integrated capabilities, and then demonstrate in real time and/or during planned deployments all within an 8 month period. Those areas of capability to be investigated include persistent ISR, close-in expeditionary ISR, conventional forces support to SOF, rotary wing support to SOF, all source intelligence fusion and littoral precision strike capability.</p>		

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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2012 Navy	<b>DATE:</b> February 2011
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<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0604230N: <i>Warfare Support System</i>
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<b><u>B. Program Change Summary (\$ in Millions)</u></b>	<b><u>FY 2010</u></b>	<b><u>FY 2011</u></b>	<b><u>FY 2012 Base</u></b>	<b><u>FY 2012 OCO</u></b>	<b><u>FY 2012 Total</u></b>
Previous President's Budget	6.280	3.733	3.591	-	3.591
Current President's Budget	6.796	3.733	9.944	-	9.944
Total Adjustments	0.516	-	6.353	-	6.353
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	0.750	-			
• SBIR/STTR Transfer	-0.219	-			
• Program Adjustments	-	-	6.553	-	6.553
• Section 219 Reprogramming	-0.016	-	-	-	-
• Rate/Misc Adjustments	-	-	-0.200	-	-0.200
• Congressional General Reductions	0.001	-	-	-	-
Adjustments					

**Change Summary Explanation**

Technical: Not applicable.

Schedule: Not applicable.

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2012 Navy								<b>DATE:</b> February 2011			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0604230N: <i>Warfare Support System</i>				<b>PROJECT</b> 3326: <i>NIWO Rapid Capabilities Development for CIC</i>			
<b>COST (\$ in Millions)</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012 Base</b>	<b>FY 2012 OCO</b>	<b>FY 2012 Total</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
3326: <i>NIWO Rapid Capabilities Development for CIC</i>	-	-	5.279	-	5.279	5.417	5.561	5.736	5.925	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

**A. Mission Description and Budget Item Justification**  
 Navy Irregular Warfare will provide for the validation and combat demonstration of identified technologies and/or packages of technologies to meet warfighter goals. Identify requirements necessary to meet the immediate warfighter needs, integrate those existing unique and/or related capabilities that can best meet the warfighter needs, test those integrated capabilities and then demonstrate in real time and/or during planned deployments all within an 8 month period.

<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012 Base</b>	<b>FY 2012 OCO</b>	<b>FY 2012 Total</b>
<b>Title:</b> Navy Irregular Warfare  <div style="text-align: right;"><b>Articles:</b></div>	-	-	5.279 0	-	5.279 0
<b>FY 2012 Base Plans:</b> To identify, assess, integrate and test available technologies to confront irregular challenges supporting the warfighter. Also validate and demonstrate identified technologies.					
<b>Accomplishments/Planned Programs Subtotals</b>	-	-	5.279	-	5.279

**C. Other Program Funding Summary (\$ in Millions)**  
 N/A

**D. Acquisition Strategy**  
 N/A

**E. Performance Metrics**  
 To successfully conduct technology reviews to confront irregular warfare.  
 To successfully identify and validate identified technologies.

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2012 Navy											<b>DATE:</b> February 2011		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0604230N: <i>Warfare Support System</i>				<b>PROJECT</b> 3326: <i>NIWO Rapid Capabilities Development for CIC</i>					

  

<b>Product Development (\$ in Millions)</b>				<b>FY 2011</b>		<b>FY 2012 Base</b>		<b>FY 2012 OCO</b>		<b>FY 2012 Total</b>			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Technology Assessment/ Demonstration	C/FP	Unknown:Unknown	-	-		4.111	Feb 2012	-		4.111	Continuing	Continuing	Continuing
<b>Subtotal</b>			-	-		4.111		-		4.111			

  

<b>Test and Evaluation (\$ in Millions)</b>				<b>FY 2011</b>		<b>FY 2012 Base</b>		<b>FY 2012 OCO</b>		<b>FY 2012 Total</b>			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Test and Evaluation	Various	Various:Various	-	-		1.168	Feb 2012	-		1.168	0.000	1.168	Continuing
<b>Subtotal</b>			-	-		1.168		-		1.168	0.000	1.168	

  

			Total Prior Years Cost	<b>FY 2011</b>		<b>FY 2012 Base</b>		<b>FY 2012 OCO</b>		<b>FY 2012 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>			-	-		5.279		-		5.279			

  

**Remarks**

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Navy		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604230N: <i>Warfare Support System</i>	PROJECT 3326: <i>NIWO Rapid Capabilities Development for CIC</i>

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2012 Navy			<b>DATE:</b> February 2011
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0604230N: <i>Warfare Support System</i>	<b>PROJECT</b> 3326: <i>NIWO Rapid Capabilities Development for CIC</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b><i>Proj 3326</i></b>				
System Development: Technology Assessments/Demonstrations	1	2012	4	2016
System Development: Test and Evaluations	1	2012	4	2016

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy									DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604230N: Warfare Support System				PROJECT 4011: Naval Coastal Warfare Surv and C4I Sys			
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
4011: Naval Coastal Warfare Surv and C4I Sys	6.796	3.733	4.170	-	4.170	3.750	3.263	3.823	3.855	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

## A. Mission Description and Budget Item Justification

The Maritime Expeditionary Security Force (MESF), formerly Naval Coastal Warfare (NCW), consists of two Groups and ten Squadrons; nine regular and one special (Guam). Each squadron is organized by Boat Detachments, Security Detachments and Command and Control (C2) divisions. The C2 Division is comprised of Sensor Detachments (SENSDET) operating the Radar Sonar Surveillance Center (RSSC) and Communications Detachments (COMMSDET) operating the Mobile Ashore Support Terminal (MAST IIIs), each separately funded. The Radar Sonar Surveillance Center (RSSC) is the only land-based and rapidly deployable mobile Navy system with the ability to conduct surface and subsurface surveillance in coastal and littoral areas. The system provides detailed contact information via various C4I systems to the tactical area commander based on radar, visual, thermal, electronic, and underwater acoustic sensor information. Missions supported with the MIUW-RSSCs are: OCONUS and INCONUS Force Protection, protecting port areas, high value assets, and surveilling the near shore areas. The MAST III is the C4ISR hub for the NCW Commander. MAST IIIs deploy to support Force Protection/Force Security Officer for Commander, Amphibious Group in its Harbor Defense and Coastal Sea Control missions.

As stated in the Maritime Expeditionary Security Force (MESF) CONOPS dated 11 April 2007: The MESF organization will be established through realignment of the Naval Coastal Warfare (NCW) organizations (NCW Squadrons, Mobile Inshore Undersea Warfare Units, Inshore Boat Units, Mobile Security Squadrons, Mobile Security Detachments, Embarked

Security Detachments, and Embarked Security Teams) into the MESF structure. Further realignment will result in the integration of intelligence, VBSS, and additional waterborne and security detachments to support new mission capability and provide additional NCC / JFMCC capacity. In addition to enhancing readiness of the current force, MESF will deploy adaptive force packages (AFPs) tailored for the specific missions to achieve greater efficiency and combat readiness than the current NCW force. By establishing a professional warfare community and dedicated Maritime Expeditionary Security Force capable of meeting the full range of security requirements, MESF closes a critical gap essential to full mission readiness for MSO. MESF provides a structure that establishes a single integrated maritime security force with one standard for training, certification, employment, and tactics, techniques, and procedures (TTP).

This funding supports the future direction of the MESF as it is being determined externally by world events and internally by the progress of DoD initiatives to replace Cold War forces and capabilities with 21st century transformational forces and capabilities. The associated developmental efforts will ultimately transition into an adaptive force package Navy Expeditionary Security System (NESS). MESF forces currently field legacy systems designed to counter more traditional military threats in a two Major Theater War scenario. Future MESF units will develop into a highly effective, relatively low cost transformational force capable of operating anywhere in the world to perform

a spectrum of force protection missions ranging from full scale port security/harbor defense operations during wartime to short duration point defense of high value units or facilities in operations other than war. This transformational force will be agile, tailorable, and scalable and will use applied technology to quickly detect, deter or

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## Navy

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy			DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)		R-1 ITEM NOMENCLATURE PE 0604230N: Warfare Support System		PROJECT 4011: Naval Coastal Warfare Surv and C4I Sys		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)						
		FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
<p><b>FY 2010 Accomplishments:</b> MESF Upgrades - Researched and developed next generation NCW surveillance and C4I systems capabilities, to include new or improved Tactical Command and Control system, Electronic Systems Management, Under-Sea surveillance, Acoustic tracking of surface contacts, Data Fusion, Autonomous Sensors, Small Craft Situational Awareness/Combat ID, improved IR cameras, auto detect and track software, and improved data recording technologies. The next generation capabilities are based on the requirements in the Maritime Expeditionary Security Initial Capability Document (MES ICD). The Modular Unmanned Scouting Craft Littoral (MUSCL), is man-portable "X-Class" Unmanned Surface Vehicle will provide enhanced surveillance and reconnaissance capability to Naval Expeditionary Combat Command (NECC) Riverine forces. MUSCL will be developed, tested, and delivered (3 systems) to NECC Forces.</p> <p>Continued development of the Tactically Integrated Sensors, Abbreviated Acquisition Program (TIS AAP) to modify and transition an ASW combat system software tool to the MESF Forces. Provided system engineering and software/system integration activities with next generation C4ISR systems and sensors with a specific focus on the transition of the Improved Imaging Technology (IIT) Future Naval Capability sensor systems. The IIT FNC supports the MESF role in Maritime Domain Awareness and is a capability need for the Integrated Swimmer Defense program. Provided program management support to transition next generation MESF capabilities based on the Maritime Expeditionary Security Initial Capabilities Document (MES ICD).</p> <p><b>FY 2011 Plans:</b> MESF Upgrades - Continue research and development efforts to integrate emerging C4I technologies into MES units. Efforts will focus on improved satellite communications, integration with the next generation of naval networks and improvements to network security applications. The next generation capabilities are based on the requirements in the Maritime Expeditionary Security Initial Capability Document (MES ICD).</p> <p><b>FY 2012 Base Plans:</b> MESF Upgrades - Provide management support and development of new C4ISR capabilities for Naval Coastal Warfare forces.</p>						
<p><b>Title:</b> Identity Dominance System</p> <p><b>Articles:</b></p> <p><b>FY 2010 Accomplishments:</b></p>		3.764 0	2.856 0	1.741 0	-	1.741 0

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)							FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Identity Dominance System - Program Management acquisition preparations for a Milestone C for the IDS program of record and the design and development of the IDS device. Additional efforts focused on systems engineering and hardware/software integration of the Identity Dominance System device.  <b>FY 2011 Plans:</b> Identity Dominance System - Program Management acquisition preparations for a Milestone C for the IDS program of record and continued development of the IDS hardware and software. Additional efforts will focus on developmental and operational testing of the Identity Dominance System system in preparation for Full Rate Production.  <b>FY 2012 Base Plans:</b> Identity Dominance System - Program Management acquisition preparations for a Milestone C for the IDS program of record and the design and development of the IDS device. Additional efforts will focus on continued developmental and operational testing of the Identity Dominance System and Full Rate Production.											
Accomplishments/Planned Programs Subtotals							6.796	3.733	4.170	-	4.170
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• 0203422N/8I20: Maritime Expeditionary Security Force	18.476	5.317	0.136	14.680	14.816	5.858	7.623	7.399	7.516	0.000	67.005
• 0208147N/8128I: Physical Security Equipment	0.030	0.030	1.830	0.000	1.830	3.158	3.186	3.186	3.186	0.000	14.606
D. Acquisition Strategy											
MESF (formerly NCW) - There are ten (10) MESF MAST III systems and twenty (20) MIUW-RSSC systems. The Naval Coastal Warfare systems, the Mobile Ashore Support Terminal (MAST III) and the MIUW Radar Sonar Surveillance Center (RSSC) AN/TSQ-108A(V)4 MOD 2 require the production of Engineering Change Packages (ECPs) for the purposes of technology refresh and to mitigate the impact of obsolescent components. This issue supports the development and testing of the ECP kits as well as the procurement of material of initial kits involved in testing. For the MAST III systems - AN/USC-60 baseband equipment upgrades and GCCS-M upgrades. Timeplex are no longer supported and will need to be replaced with Promina multiplexers. For the MIUW systems - The key effort in FY10 is to provide an IP connectivity path using 1) VSAT for short ops requiring quick set ups using commercial SATCOM and 2) USC-67 (triband SHF) for longer ops using MILSATCOM. This IP capability is required because Navy legacy											

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<p>circuits that MIUW relies on (i.e. OTCIXS, CUDIXS, Fleet Broadcast) are being ceased in FY11 and transitioning to IP circuits (i.e. DMS Proxy, Assured IP). GCCS-M upgrades from 3.x to 4.x (or Maritime Tactical Services) will be required as 3.x will not be supported after FY10.</p> <p>IDS - The fundamental purpose of the IDS program is to provide the Navy and Marine Corps with an integrated and ruggedized capability to employ individual-oriented identity information in the conduct of maritime and expeditionary operations. Fieldable prototypes in response to the CENTCOM JUONS were evaluated in limited user assessments and under stringent to meet Naval operational effectiveness and suitability. Additionally, a market survey conducted and concluded that no COTS or GOTS systems could meet the requirements in the IDS/JPI(V)1 program is planned to enter System Demonstration (SD) at Milestone B in 4QTR FY10, and the SD phase is planned to culminate in a Milestone C decision in 1QTR FY12. The SBIR process was executed in a Phase I initiative as a risk mitigation step to enable the EMD Phase II process in developmental testing, design refinement, production representative level articles for evaluation/selection, and logistical support preparations to formulate the production decision. Production will be accomplished via a prime contractor to be selected during a competitive contracting process.</p> <p><b><u>E. Performance Metrics</u></b></p> <p>MESF: Successfully complete Preliminary Design Review (PDR), Critical Design Review (CDR) and Physical Configuration Audit (PCA) for Expeditionary Warfare Decision System (EWDS) (formerly Tactically Integrated Sensor (TIS)).</p> <p>IDS: Conduct Milestone reviews in order to successfully achieve Milestone B and C. Successfully achieve IOC.</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Navy										DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604230N: Warfare Support System				PROJECT 4011: Naval Coastal Warfare Surv and C4I Sys					
Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Hardware/Software Development	C/CPFF	SSC CH:SSC SAN DIEGO	0.100	-		-		-		-	0.000	0.100	Continuing
Hardware/Software Development	WR	NSWC DAHLGREN:DAHLGREN	3.050	0.200	Feb 2011	0.200	Feb 2012	-		0.200	Continuing	Continuing	Continuing
Hardware/Software Development	WR	NSWC CRANE:CRANE	0.750	0.150	Feb 2011	0.200	Feb 2012	-		0.200	0.000	1.100	Continuing
Systems Engineering1	C/CPFF	SSC CH:SSC SAN DIEGO	0.547	-		-		-		-	0.000	0.547	Continuing
Systems Engineering2	WR	SSC CH:SSC SAN DIEGO	0.600	0.150	Feb 2011	-		-		-	0.000	0.750	Continuing
Systems Engineering3	WR	NUWC:KEYPORT	0.700	0.150	Feb 2011	-		-		-	0.000	0.850	Continuing
Systems Engineering4	WR	NSMRL:Not Specified	0.100	-		-		-		-	0.000	0.100	Continuing
Systems Engineering5	C/CPFF	SSC SD:SAN DIEGO	6.647	-		-		-		-	0.000	6.647	Continuing
Systems Engineering6	WR	NSWC:DAHLGREN	2.300	0.150	Feb 2011	0.500	Feb 2012	-		0.500	0.000	2.950	Continuing
Systems Engineering7	WR	NUWC:NEWPORT	-	0.080	Feb 2011	0.200	Feb 2012	-		0.200	0.000	0.280	Continuing
Training Development	WR	SSC CH:SSC SAN DIEGO	0.401	-		-		-		-	0.000	0.401	Continuing
Test Integration	WR	NUWC:KEYPORT	0.819	-		-		-		-	0.000	0.819	Continuing
Test Integration	WR	NSWC:CRANE	0.200	-		-		-		-	0.000	0.200	Continuing
Subtotal			16.214	0.880		1.100		-		1.100			
Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Technical Data	WR	SSC CH/SSC SD:SSC SAN DIEGO	0.301	0.080	Feb 2011	0.100	Feb 2012	-		0.100	0.000	0.481	Continuing
Technical Data	WR	NSWC:CRANE	0.250	-		-		-		-	0.000	0.250	Continuing
Technical Data	WR	NUWC:KEYPORT	0.200	0.050	Feb 2011	0.170	Feb 2012	-		0.170	0.000	0.420	Continuing
Technical Data	MIPR		0.175	-		-		-		-	0.000	0.175	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Navy										DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE				PROJECT					
1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)				PE 0604230N: Warfare Support System				4011: Naval Coastal Warfare Surv and C4I Sys					
Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
		Coast Guard:Not Specified											
Technical Data	WR	NSWC:DAHLGREN	-	0.175	Feb 2011	-		-		-	0.000	0.175	Continuing
Test Planning	WR	NUWC:KEYPORT	0.100	0.100	Feb 2011	0.090	Feb 2012	-		0.090	0.000	0.290	Continuing
Test Planning	WR	NSWC:CRANE	0.250	0.100	Feb 2011	0.150	Feb 2012	-		0.150	0.000	0.500	Continuing
Test Planning	WR	SSC CH/:SSC SAN DIEGO	0.100	0.100	Feb 2011	0.250	Feb 2012	-		0.250	0.000	0.450	Continuing
Test Planning - Non-Lethal	WR	NSWC:DAHLGREN	0.500	0.250	Feb 2011	0.150	Feb 2012	-		0.150	0.000	0.900	Continuing
Test Planning - IDS	WR	NSWC:DAHLGREN	0.300	0.150	Feb 2011	0.250	Feb 2012	-		0.250	0.000	0.700	Continuing
Subtotal			2.176	1.005		1.160		-		1.160	0.000	4.341	
Management Services (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support	WR	SSC CH:SSC SAN DIEGO	0.111	0.100	Feb 2011	0.200	Feb 2012	-		0.200	0.000	0.411	Continuing
Program Management Support	WR	NUWC:KEYPORT	0.100	-		-		-		-	0.000	0.100	Continuing
Program Management Support	WR	NSWC:DAHLGREN	1.942	1.000	Feb 2011	0.703	Feb 2012	-		0.703	0.000	3.645	Continuing
Program Management Support	WR	NSWC:CRANE	0.402	0.160	Feb 2011	0.250	Feb 2012	-		0.250	0.000	0.812	Continuing
Program Management Support	Various	Various:Various	1.920	0.558	Feb 2011	0.727	Feb 2012	-		0.727	0.000	3.205	Continuing
Travel	Various	Various:Various	0.055	0.030	Feb 2011	0.030	Feb 2012	-		0.030	0.000	0.115	Continuing
DAWDF	Various	Not Specified:Not Specified	0.040	-		-		-		-	0.000	0.040	Continuing
Subtotal			4.570	1.848		1.910		-		1.910	0.000	8.328	

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Navy								DATE: February 2011							
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604230N: Warfare Support System				PROJECT 4011: Naval Coastal Warfare Surv and C4I Sys							
				Total Prior Years Cost		FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals				22.960		3.733		4.170		-		4.170			

**Remarks**

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<b>Exhibit R-4, RDT&amp;E Schedule Profile:</b> PB 2012 Navy		<b>DATE:</b> February 2011
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0604230N: <i>Warfare Support System</i>	<b>PROJECT</b> 4011: <i>Naval Coastal Warfare Surv and C4I Sys</i>

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2012 Navy			<b>DATE:</b> February 2011
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0604230N: <i>Warfare Support System</i>	<b>PROJECT</b> 4011: <i>Naval Coastal Warfare Surv and C4I Sys</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b>Proj 4011</b>				
Acquisition Milestones: IDS: IDS MILESTONE B	4	2010	4	2010
Acquisition Milestones: IDS: IDS MILESTONE C	1	2012	1	2012
Acquisition Milestones: IDS: IDS CPD	3	2011	3	2011
Acquisition Milestones: IDS: IDS IOT&E	2	2012	2	2012
Acquisition Milestones: IDS: IDS FRP DR	3	2012	3	2012
Acquisition Milestones: IDS: IDS IOC	4	2012	4	2012
Acquisition Milestones: IDS: IDS FOC	4	2015	4	2015
Acquisition Milestones: EWDS: EWDS (formerly TIS) AAP IOC	4	2011	4	2011
Acquisition Milestones: EWDS: EWDS (formerly TIS) AAP FOC	2	2014	2	2014
Acquisition Milestones: MAST: MAST III MOD 1 FOC	2	2011	2	2011
Acquisition Milestones: MAST: MAST III MOD 2 FOC	2	2013	2	2013
Acquisition Milestones: MAST: MAST III MOD 3 FOC	1	2016	1	2016
Acquisition Milestones: MIUW: MIUW v4 MOD 3 FOC	3	2013	3	2013
Acquisition Milestones: MIUW: MIUW v4 MOD 4 FOC	1	2016	1	2016
System Development: System Upgrades: EWDS (formerly TIS) AAP PRODUCTION DECISION	2	2010	2	2010
System Development: System Upgrades: MAST III MOD 1 UPGRADES	1	2010	1	2010
System Development: System Upgrades: MAST III MOD 2 UPGRADES	1	2010	2	2013
System Development: System Upgrades: MAST III MOD 3 UPGRADES	1	2013	1	2016
System Development: System Upgrades: MAST III MOD 3 ECP APPROVAL	4	2010	4	2010
System Development: System Upgrades: MIUW v4 MOD 3 UPGRADES	1	2010	3	2013
System Development: System Upgrades: MIUW v4 ECP APPROVAL	1	2011	1	2011

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2012 Navy		<b>DATE:</b> February 2011
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0604230N: <i>Warfare Support System</i>	<b>PROJECT</b> 4011: <i>Naval Coastal Warfare Surv and C4I Sys</i>

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
System Development: System Upgrades: MIUW v4 MOD 4 UPGRADES	1	2013	1	2016

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2012 Navy								<b>DATE:</b> February 2011			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0604230N: <i>Warfare Support System</i>				<b>PROJECT</b> 9C86: <i>Combatant Craft Replacement</i>			
<b>COST (\$ in Millions)</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012 Base</b>	<b>FY 2012 OCO</b>	<b>FY 2012 Total</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
9C86: <i>Combatant Craft Replacement</i>	-	-	0.495	-	0.495	0.991	0.989	0.989	0.990	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

**A. Mission Description and Budget Item Justification**

Combatant Craft Replacements will provide second generation Riverine Multi Mission Craft that will replace in-service Riverine Patrol Boats (RPBs) and Riverine Assault Boats (RABs). Combatant Craft replacements will: conduct inland waterway patrol and interdiction to preserve the rivers for friendly use as lines of communications; deny the use of rivers and waterways to waterborne and immediate shore sited hostile forces by barrier and interdiction operations; and, with augmentation of ground and air forces, locate and destroy hostile forces within a riparian area. Specific mission and capabilities will be identified in an NECC developed/OPNAV N85 approved Initial Capabilities Document (ICD). RDT&E funding will fund feasibility studies and procurement of mock-ups and prototype craft to demonstrate capabilities prior to production craft procurement.

<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012 Base</b>	<b>FY 2012 OCO</b>	<b>FY 2012 Total</b>
<b>Title:</b> Combatant Craft Replacement  <div style="text-align: right;"><b>Articles:</b></div> <b>FY 2012 Base Plans:</b> Conduct Future Combatant Craft feasibility design study(ies). Evaluate transition potential of the Riverine Patrol Boat (RPB) Advance Weapon Systems to interface with the Riverine Assault Boat (RAB), Riverine Command Boat (RCB) and Force Protection-Coastal (FP-C).	-	-	0.495 0	-	0.495 0
<b>Accomplishments/Planned Programs Subtotals</b>	-	-	0.495	-	0.495

**C. Other Program Funding Summary (\$ in Millions)**  
N/A

**D. Acquisition Strategy**  
Acquisition of RDT&E funded mockup and prototype craft for testing to be accomplished using "tailored" GSA procurements in accordance with a PMS325G approved/OPNAV N85 endorsed Riverine Combatant Craft Replacement Acquisition Strategy.

**E. Performance Metrics**  
Successfully demonstrate system and prototype functionality to support approved Initial Capabilities Document (ICD).

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2012 Navy											<b>DATE:</b> February 2011		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0604230N: <i>Warfare Support System</i>				<b>PROJECT</b> 9C86: <i>Combatant Craft Replacement</i>					

  

Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Craft Feasibility Study	WR	NSWC:Carderock, MD	-	-		0.050	Dec 2011	-		0.050	0.000	0.050	
Craft Mockup Award	WR	NSWC:Carderock, MD	-	-		0.400	Aug 2012	-		0.400	0.000	0.400	
Craft Study Report	WR	NSWC:Carderock, MD	-	-		0.045	Sep 2012	-		0.045	0.000	0.045	
<b>Subtotal</b>			-	-		0.495		-		0.495	0.000	0.495	

  

	Total Prior Years Cost	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
<b>Project Cost Totals</b>	-	-	0.495	-	0.495	0.000	0.495	

  

**Remarks**

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<b>Exhibit R-4, RDT&amp;E Schedule Profile:</b> PB 2012 Navy			<b>DATE:</b> February 2011		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>		<b>R-1 ITEM NOMENCLATURE</b> PE 0604230N: <i>Warfare Support System</i>		<b>PROJECT</b> 9C86: <i>Combatant Craft Replacement</i>	

	FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
<b>Proj 9C86</b>																												
Combatant Craft Feasibility Study(ies) Award																												
Combatant Craft Mockup Award																												
Combatant Craft Study Report(s)																												
Combatant Craft Mockup Delivery																												
Combatant Craft Prototype Awards																												
Combatant Craft Prototype Deliveries																												
Craft Test and Evaluation																												
Selection of Craft for Production																												

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2012 Navy			<b>DATE:</b> February 2011
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0604230N: <i>Warfare Support System</i>	<b>PROJECT</b> 9C86: <i>Combatant Craft Replacement</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b><i>Proj 9C86</i></b>				
Combatant Craft Feasibility Study(ies) Award	1	2012	1	2012
Combatant Craft Mockup Award	4	2012	4	2012
Combatant Craft Study Report(s)	4	2012	4	2012
Combatant Craft Mockup Delivery	2	2013	2	2013
Combatant Craft Prototype Awards	3	2013	3	2013
Combatant Craft Prototype Deliveries	3	2014	3	2014
Craft Test and Evaluation	4	2014	1	2015
Selection of Craft for Production	2	2015	2	2015

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